



PTO/SB/01 (08-03)

Approved for use through 07/31/2006. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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**DECLARATION FOR UTILITY OR  
DESIGN  
PATENT APPLICATION  
(37 CFR 1.63)**Declaration  
Submitted  
With Initial  
Filing

OR

Declaration  
Submitted after Initial  
Filing (surcharge  
(37 CFR 1.16 (e))  
required)

Attorney Docket Number

2002-IP-007134

First Named Inventor

Keith A. Frost

COMPLETE IF KNOWN

Application Number

Filing Date

Art Unit

Examiner Name

**I hereby declare that:**

Each inventor's residence, mailing address, and citizenship are as stated below next to their name.

I believe the inventor(s) named below to be the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Methods and Compositions for Treating Subterranean Zones

(Title of the Invention)

the specification of which



is attached hereto

OR



was filed on (MM/DD/YYYY)

09-19-2003

as United States Application Number or PCT International

Application Number

10/665,310

and was amended on (MM/DD/YYYY)

(if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent, inventor's or plant breeder's rights certificate(s), or any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached?	
				Yes	No
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

[Page 1 of 2]

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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## DECLARATION — Utility or Design Patent Application

Direct all correspondence to: <input checked="" type="checkbox"/> Customer Number: <input type="text"/>				OR <input checked="" type="checkbox"/> Correspondence address below	
Name Halliburton Energy Services - ATTN: Robert A. Kent					
Address P.O. Box 1431					
City Duncan		State OK		ZIP 73536-0440	
Country USA		Telephone 580-251-3125		Fax 580-251-3917	
I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.					
NAME OF SOLE OR FIRST INVENTOR:		<input type="checkbox"/> A petition has been filed for this unsigned inventor			
Given Name (first and middle [if any]) Keith A.			Family Name or Surname Frost		
Inventor's Signature <i>Keith A. Frost</i>				Date 9-18-03	
Residence: City Duncan		State OK		Country USA	
Citizenship US					
Mailing Address Rt.2, Box 82					
City Duncan		State OK		ZIP 73533	
Country USA					
NAME OF SECOND INVENTOR:		<input type="checkbox"/> A petition has been filed for this unsigned inventor			
Given Name (first and middle [if any]) Bradley L.			Family Name or Surname Todd		
Inventor's Signature <i>Bradley L. Todd</i>				Date Sept 17, 2003	
Residence: City Duncan		State OK		Country USA	
Citizenship US					
Mailing Address 1810 Windsor					
City Duncan		State OK		ZIP 73533	
Country USA					
<input checked="" type="checkbox"/> Additional inventors or a legal representative are being named on the 1 supplemental sheet(s) PTO/SB/02A or 02LR attached hereto.					

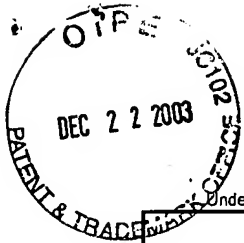
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**DECLARATION****ADDITIONAL INVENTOR(S)**  
Supplemental SheetPage 1 of 1

<b>Name of Additional Joint Inventor, if any:</b>		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle (if any))		Family Name or Surname	
Richard W.		Pauls	
Inventor's Signature <i>Richard W. Pauls</i>		Date <i>10-7-03</i>	
Duncan Residence: City	OK State	USA Country	US Citizenship
1808 Cook Street Mailing Address			
Mailing Address			
Duncan City	OK State	73533 Zip	USA Country
<b>Name of Additional Joint Inventor, if any:</b>		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle (if any))		Family Name or Surname	
Ian		Robb	
Inventor's Signature <i>Ian Robb</i>		Date <i>9-17-03</i>	
Duncan Residence: City	OK State	USA Country	US Citizenship
726 Smith Road Mailing Address			
Mailing Address			
Duncan City	OK State	73533 Zip	USA Country
<b>Name of Additional Joint Inventor, if any:</b>		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle (if any))		Family Name or Surname	
Inventor's Signature		Date	
Residence: City	State	Country	Citizenship
Mailing Address			
Mailing Address			
City	State	Zip	Country

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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**STATEMENT UNDER 37 CFR 3.73(b)**

Applicant/Patent Owner: Keith A. Frost, et al

Application No./Patent No.: Unknown Filed/Issue Date: Concurrently Herewith

Entitled: Methods and Compositions for Treating Subterranean Zones

Halliburton Energy Services, Inc., a corporation  
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or  
2. ☐ an assignee of less than the entire right, title and interest.  
The extent (by percentage) of its ownership interest is \_\_\_\_\_ %  
in the patent application/patent identified above by virtue of either:

A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

OR

B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

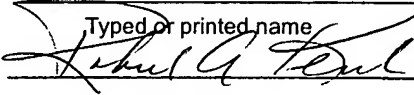
1. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
2. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
3. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

☒ Copies of assignments or other documents in the chain of title are attached.  
[NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

12-16-03  
Date  
580-251-3125  
Telephone number

Robert A. Kent  
Typed or printed name  
  
Signature  
Senior Counsel  
Title

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

**ASSIGNMENT**

Whereas, I/We, **Keith A. Frost, Bradley L. Todd, Richard W. Pauls and Ian Robb** of Stephens County, Duncan, Oklahoma, have invented **"Methods and Compositions for Treating Subterranean Zones"** for which I have made application for Letters Patent of the United States; and

Whereas, HALLIBURTON ENERGY SERVICES, INC., a Delaware Corporation, having a place of business at 10200 Bellaire Boulevard, Houston, Texas 77072 is desirous of acquiring an interest therein;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I/We, by these presents do sell, assign and transfer and convey unto HALLIBURTON ENERGY SERVICES, INC., its successors and assigns, the full and exclusive right, for the United States of America and its territorial possessions and for any and all foreign countries, in and to the said invention, described in the Patent Application serial number **10/665,310** filed on **09/19/2003**, and any divisional, continuing or reissue application based on the present application preparatory to obtaining Letters Patent of the United States therefor; said invention, application and any and all Letters Patent issuing therefor to be held and enjoyed by HALLIBURTON ENERGY SERVICES, INC., for its own use and behoof, and for its legal representatives, successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me and had this assignment and sale not been made.

And I do further agree to sign all papers, make all rightful oaths and do all requisite acts for the filing of any disclaimer or for the filing and assignment of any divisional, continuing or reissue application or applications for patent based on the present application, as well as for any other U.S. or foreign application for patent which relates to the said invention.

And I do further agree to communicate to HALLIBURTON ENERGY SERVICES, INC., its successors, assign or other legal representatives, such facts relating to the invention disclosed in the present application or Letters Patent issuing thereon as may be known to me, and to testify as to such facts in any interference or other litigation.

Executed this 18 day of September, 2003, at Duncan, Stephens County, Oklahoma U.S.A.

Keith A. Frost  
Signature

State of Oklahoma )  
                                  ) ss  
County of Stephens )

Before me personally appeared said **Keith A. Frost** and acknowledged the foregoing instrument to be his free act and deed this 18<sup>th</sup> day of September, 2003.

Seal  
2-13-2006

Sammy Knight  
(Notary Public)  
#02002595

Executed this 17 day of September, 2003, at Duncan, Stephens County, Oklahoma U.S.A.

Bradley L. Todd  
Signature

State of Oklahoma )  
                                  ) ss  
County of Stephens )

Before me personally appeared said **Bradley L. Todd** and acknowledged the foregoing instrument to be his free act and deed this 17<sup>th</sup> day of September, 2003.

Seal  
2-13-2006

Sammy Knight  
(Notary Public)  
#02002595

Executed this 7 day of ~~September~~<sup>October</sup>, 2003, at Duncan, Stephens County, Oklahoma U.S.A.

Richard W. Pauls  
Signature

State of Oklahoma     )  
                                  ) ss  
County of Stephens    )

Before me personally appeared said **Richard W. Pauls** and acknowledged the foregoing instrument to be his free act and deed this 7<sup>th</sup> day of ~~September~~<sup>October</sup>, 2003.

Seal  
2-13-2006

Sammy Knight  
(Notary Public)  
#02002595

Executed this 9-17-03 day of September, 2003, at Duncan, Stephens County, Oklahoma U.S.A.

Ian Robb  
Signature

State of Oklahoma     )  
                                  ) ss  
County of Stephens    )

Before me personally appeared said **Ian Robb** and acknowledged the foregoing instrument to be his free act and deed this 17<sup>th</sup> day of September, 2003.

Seal  
2-13-2006

Sammy Knight  
(Notary Public)  
#02002595



## POWER OF ATTORNEY OR AUTHORIZATION OF AGENT

Application Number	
Filing Date	
First Named Inventor	Keith A. Frost, et al
Title	Methods and Compositions
Art Unit	
Examiner Name	
Attorney Docket Number	2002-IP-007134

I hereby appoint:

☐ Practitioners at Customer Number

Place Customer  
Number Bar Code  
Label here

OR

☒ Practitioner(s) named below:

Name	Registration Number
See attached	

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please change the correspondence address for the above-identified application to:

☐ The above-mentioned Customer Number.

OR

☐ Practitioners at Customer Number.

Place Customer  
Number Bar Code  
Label here

OR

<input type="checkbox"/> Firm or Individual Name				
Address				
Address				
City		State		Zip
Country				
Telephone		Fax		

I am the:

☐ Applicant/Inventor.

☒ Assignee of record of the entire interest. See 37 CFR 3.71.  
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).

### SIGNATURE of Applicant or Assignee of Record

Name	Robert A. Kent		
Signature			
Date		Telephone	580-251-3125

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*.

☐ \*Total of \_\_\_\_\_ forms are submitted.

This collection of information is required by 37 CFR 1.31 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Please type a plus sign (+) inside this box → ☐

PTO/SB/02C (3-97)

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Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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## DECLARATION

## REGISTERED PRACTITIONER INFORMATION (Supplemental Sheet)

Name	Registration Number	Name	Registration Number
Halliburton Energy Services, Inc. Practitioners		Haynes & Boone Practitioners	
William E. Shull	29,438	Randall C. Brown	31,213
Robert A. Kent	28,626	Michael A. Davis, Jr.	35,488
Craig W. Roddy	36,256	Brian J. Hubbard	45,873
John W. Wustenberg	35,415	Warren B. Kice	22,732
William M. Imwalle	35,904		

**Read the Statement:** This form is estimated to take 0.4 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20501. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Assistant Commissioner for Patents, Washington, DC 20501.

Declaration — Registered Practitioner Information (Supplemental Sheet) (PTO/SB/02C)(1-1.4)